



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/643,993 | 08/20/2003 | Takeshi Yamakawa | 241531US3 | 5146 |

22850 7590 04/01/2008
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

| |
|----------|
| EXAMINER |
|----------|

CHEN, HUO LONG

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

4157

| | |
|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

04/01/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/643,993

Applicant(s)

YAMAKAWA ET AL.

Examiner

HUO LONG CHEN

Art Unit

4157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/13/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/13/2008.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to **claims 1-9, 11 and 12** have been considered but are moot in view of the new ground(s) of rejection. Applicant amends independent claim 1, which results in the scope different from that of the originally presented claim 1.
2. The submissions of the terminal disclaimer have been considered and the obviousness-type double patenting rejection is hereby withdrawn.
3. The 112, first paragraph rejection of claim 9 from the last Office Action inadvertently left out the rationale, which is the specification fails to provide adequate support for the claimed limitation "a length of the fixing member is equal to or longer than one third of a length of the condensing lens" to comply with the enablement requirement. Clarification is requested.

Information Disclosure Statement

3. The document number **2-64959** submitted on 02/13/2008 is not considered because it lacks English translation.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

Art Unit: 4157

described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 9 recites the limitation "a length of the fixing member is equal to or longer than one third of a length of the condensing lens" which has not support from the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai (5,877,903) in view of Lam (US 2002/0006687).

With respect to **claim 1**, Anzai teaches a lens mounting structure, which is formed integrally with an optical housing and the lens is attached to the mounting structure (col. 4, lines 34-36, Fig. 2). A lens mounting structure for an optical housing comprises a base (Fig. 2, element 22), a lens bonding structure (Fig. 2, elements 28, 30 or 32) provided on the base, and a scanning lens (Fig.1, element 20) mounted on the lens bonding structure through the adhesive layer (Fig. 2, elements 34A, 34B or 34C).

However, Anzai fails to teach: if the lens mounting structure can be fixed to the optical housing with adhesive, if the lens mounting structure can transmit ultraviolet ray therethrough and the condensing lens, the fixing member and the housing are fixed at

Art Unit: 4157

the same time by irradiating ultraviolet rays in such a way the ultraviolet rays transmit through the condensing lens, the ultraviolet cure adhesive and the fixing member.

Lam discloses using UV cure adhesive (Fig. 15, element 113) to attach a lens-and-frame assembly consisting of lens (Fig. 15, element 89) and frame (Fig. 15, element 91) to a lens shelf (Fig. 15, element 109, paragraph 0044). UV light is using to activate the UV cure adhesive (abstract). In addition, Lam further teaches that a frame structure (Fig. 15, element 91) is part of the IC chip package which is preferably a plastic molded package (paragraph 48, Fig. 17). Since Lam's frame structure is made of plastic, it is capable to transmit the UV light to activate the UV cure adhesive to fix both lens-and-frame assembly (Fig. 15, element 89) and a lens shelf (Fig. 15, element 109, paragraph 0044) together. Furthermore, Examiner does not see the criticality of the fixing order to fix the condensing lens, the fixing member and housing together by irradiating ultraviolet rays. Also, it is well known that the condensing lens is either made of plastic or glass. Both plastic and glass is capable of transmitting the UV light to activate the UV cure adhesive.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to combine the inventions of Anzai and Lam because integrating the attachment member to the base-plate or using the UV cure adhesive to fix the attachment member and the base-plate together is design preference.

With respect to **claim 9**, according to Anzai's invention, the lens is fixed to a lens mounting structure such that the length of the lens mount is parallel to the length of the lens (Fig. 1 & 2). Comparing with the length of the lens (Fig.1 element 20) and the lens

Art Unit: 4157

mounting structure (Fig.2 element 22), the length of the lens mount is longer than the length of the lens.

7. With respect to **claims 2-4, and 11**, they are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai (US 5,526,193) in view of Tachibe et al. (US 6,449,107) for the same reasons as stated in the last Office Action of record.
8. With respect to **claims 5-8**, they are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai (US 5,526,193) in view of Itabashi (US 6,700,687) and Lam (US 2002/0006687) for the same reasons as stated in the last Office Action of record.
9. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai (US 5,526,193) in view of Tachibe et al. (US 6,449,107) and Rivman et al. (US 3,965,952) for the same reasons as stated in the last Office Action of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 4157

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUO LONG CHEN whose telephone number is (571)270-3759. The examiner can normally be reached on 8:00am to 5:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571)272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/643,993

Page 7

Art Unit: 4157

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huo Long Chen/

Patent Examiner

/Vu Le/

Supervisory Patent Examiner, Art Unit 4157